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10/617,901	07/10/2003	Mark Vandever Dunkle	AM 7134	4077
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Patent Counsel Applied Materials, Inc. P.O. Box 450-A Santa Clara, CA 95052			ART UNIT 2166	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,901	Applicant(s) DUNKLE, MARK VANDEVERT	
	Examiner Usmaan Saeed	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-45 are pending in this office action.

Priority

Acknowledgment is made of applicant's claim for priority based on provisional application no. 60/451,301 filed March 1, 2003.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 13, 15-16, 21, 23-27, 34, 36-37, 42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by **Guillermo Rudolfo Chacon (Chacon hereinafter)** (U.S. Patent No. 6,128,588).

With respect to claim 1, **Chacon** teaches **a method of storing information in a database to characterize attributes outputted by different classes of equipment, comprising the steps of:**

“providing a database memory device” as auto scheduling system 22 includes scheduler database 30 (**Chacon** Col 2, Lines 64-65).

“storing in the database memory device a plurality of attribute data records, wherein the step of storing each attribute data record includes” as scheduler database 30 stores production models for simulation as well as data extracted from the manufacturing execution system 20 to be used for the simulation. The stored information includes T1 and T2 parameters, lot status, machine tact (time standard), and Kanban worksheets (**Chacon** Col 2, Lines 66-67 & Col 3, Lines 1-4).

“storing in that record a first field identifying a class of equipment” as there may be a number of different algorithms in use depending on the type of equipment (**Chacon** Col 39, Lines 46-48 & fig 5). The correct set of formulae to be applied to a given row on the tact table will be found by looking up the tact formula field in the corresponding stnfamdef record (**Chacon** Col 39, Lines 52-55). The table in Col 43, & Lines 15-25 teach that stnfamdef is equipment type record.

“storing in that record a second field identifying an attribute whose value is outputted by the class of equipment identified by the first field of that record” as according to the present invention, a method and system for creating customized machine tact information includes defining time standards as a function of process parameter and equipment parameters. For example, if a process parameter such as temperature, pressure, etc. and an equipment parameter such as equipment brand name, model, etc (**Chacon** Col 2, Lines 24-29). The machine tact information is

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created by accessing and using the stnfamdef table, which contains equipment type records defines/outputs the attributes/parameters.

“storing in that record a third field specifying an ID which the class of equipment identified by the first field of that record assigns to the attribute value identified by the second field of that record” as the rules accumulate counters for the stn (equipment identification) which are then checked against the PM limit table for that equipment ID (**Chacon** Col 30, Lines 35-37). The device name will be a concatenation of the part ID and primary procedure ID. There is an explicit field for primary procedure ID (**Chacon** Col 18, Lines 35-38). The counters for equipment identification are checking the table for the equipment ID and the equipment ID is linked/assigned to the process.

Claims 21, 42 and 44 are essentially the same as claim 1 except they set forth the claimed invention as an apparatus, a data storage medium and are rejected for the same reasons as applied hereinabove.

With respect to claim 2, **Chacon** teaches **“the method of claim 1, wherein, for each attribute data record, the ID stored in the third field uniquely specifies the attribute stored in the second field for the class of equipment stored in the first field”** as the rules accumulate counters for the stn (equipment identification) which are then checked against the PM limit table for that equipment ID (**Chacon** Col 30, Lines 35-37). According to the present invention, a method and system for creating

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customized machine tact information includes defining time standards as a function of process parameter and equipment parameters. For example, if a process parameter such as temperature, pressure, etc. and an equipment parameter such as equipment brand name, model, etc (**Chacon** Col 2, Lines 24-29). The equipment has an ID and the equipment and the ID are specifying the process and equipment parameters/attributes.

Claims 3, 4, 23, 24, and 25 are same as claim 2 except claims 23, 24, and 25 set forth the claimed invention as an apparatus and are rejected for the same reasons as applied hereinabove.

With respect to claim 5, **Chacon** teaches **the method of claim 1, wherein, for at least one attribute data record, the step of storing the second field further includes the step of:**

“storing a fourth field identifying a position of a chamber connected to the class of equipment identified in the first field” as (**Chacon** Col 31, Lines 1-20). This table teaches us that the PCounter “arg” contains the position of the chambers connected, which is 1-3.

Claim 26 is essentially the same as claim 5 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 6, **Chacon** teaches **“the method of claim 1, wherein, for each attribute data record, the first field identifies at least one model of equipment”** as an equipment parameter such as equipment brand name, model etc (**Chacon** Col 2, Lines 27-29). Scheduler database 30 stores production models for simulation as well as data extracted from the manufacturing execution system 20 to be used for the simulation (**Chacon** Col 2, Lines 66-67 & Col 3, Lines 1-2).

Claim 27 is essentially the same as claim 6 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 13, **Chacon** teaches **the method of claim 1, wherein the step of storing a plurality of attribute database records comprises the steps of:**

“storing in the database memory a first record including said first field, wherein the first field of the first record identifies a first class of equipment that includes a first model of equipment” as there must be a record for each stnfam referenced by stndef table (**Chacon** Col 17, Lines 33-34 & fig 7). An equipment parameter such as equipment brand name, model etc (**Chacon** Col 2, Lines 27-29). Scheduler database 30 stores production models for simulation as well as data extracted from the manufacturing execution system 20 to be used for the simulation (**Chacon** Col 2, Lines 66-67 & Col 3, Lines 1-2). These lines teach us that there are records for stnfam/equipment type and stndef/equipment ID and the models of these equipments are also stored.

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“storing in the database memory a second record including said first field, wherein the first field of the second record identifies a second class of equipment that includes a second model of equipment different from the first model” as there must be a record for each stnfam referenced by stndef table (Chacon Col 17, Lines 33-34 & fig 7). An equipment parameter such as equipment brand name, model etc (Chacon Col 2, Lines 27-29). Scheduler database 30 stores production models for simulation as well as data extracted from the manufacturing execution system 20 to be used for the simulation (Chacon Col 2, Lines 66-67 & Col 3, Lines 1-2). These lines teach us that there are multiple records for stnfam/equipment type and stndef/equipment ID and the models of these equipments are also stored.

Claim 34 is essentially the same as claim 13 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 15, Chacon teaches **“the method of claim 1, wherein, for at least one of the attribute data records, the attribute identified in the step of storing the first field is a measurement of a process being performed in a semiconductor fabrication process chamber”** as wafer fabrication, for example, involves complex dynamic production systems. The measurement of their capacity and performance such as lead-time and wafer output are not accurate enough if a solution capable of modeling the dynamic fabrication conditions and variance in the system is not used (Chacon Col 1, Lines 47-52).

Claim 36 is essentially the same as claim 15 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 16, **Chacon** teaches **“the method of claim 1, wherein, for at least one of the attribute data records, the attribute identified in the step of storing the first field is an operating condition of a process being performed in a semiconductor fabrication process chamber”** as the present invention relates to an integrated characterization and scheduling system for fabrication production systems such as wafer fabrication (**Chacon** Col 2, Lines 18-20). For example, if a process parameter such as temperature, pressure, etc. and an equipment parameter such as equipment brand name, model, etc (**Chacon** Col 2, Lines 26-29). The process parameters are the operating conditions for the process being performed.

Claim 37 is essentially the same as claim 16 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12, 14, 22, 28-33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Guillermo Rudolfo Chacon** (U.S. Patent No. 6,128,588) as applied to claims 1-6, 13, 15-16, 21, 23-27, 34, 36-37, 42 and 44 above, in view of **Robert C. Beauchesne** (**Beauchesne** hereinafter) U.S. Patent No 5,777,876.

With respect to claim 7, **Chacon** does not explicitly teach “**the method of claim 1, wherein, for each attribute data record, the first field identifies at least one version of equipment.**”

However, **Beauchesne** teaches “**the method of claim 1, wherein, for each attribute data record, the first field identifies at least one version of equipment**” as the product main fields also includes a 4 digit product version field for storing information coded value specifying the manufacturing version of the board indicating the particular assembly line (equipment complement) on which the board will be manufactured (e.g. A, B) (**Beauchesne** Col 5, Lines 62-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne's** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 28 is essentially the same as claim 7 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 8, **Chacon** teaches, **“storing a first subordinate field that identifies a model of equipment”** as an equipment parameter such as equipment brand name, model etc (**Chacon** Col 2, Lines 27-29). Scheduler database 30 stores production models for simulation as well as data extracted from the manufacturing execution system 20 to be used for the simulation (**Chacon** Col 2, Lines 66-67 & Col 3, Lines 1-2).

Chacon discloses the elements of claim 8 as noted above but does not explicitly teach the step of **“storing a second subordinate field that identifies a version of the model of equipment identified in the first subordinate field.”**

However, **Beauchesne** discloses **“storing a second subordinate field that identifies a version of the model of equipment identified in the first subordinate field”** as The product main fields also includes a 4 digit product version field for storing information coded value specifying the manufacturing version of the board indicating the particular assembly line (equipment complement) on which the board will be manufactured (e.g. A, B). A Generic name field is used for storing information which may describe the product in generic terms and this is especially useful in situations where a particular product is associated with a specific model or feature name: Taurus, Legend, etc (**Beauchesne** Col 5, Lines 1-67 & Col 6, Lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne's** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 29 is essentially the same as claim 8 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 9, **Chacon** does not explicitly teach **the method of claim 1, wherein, for at least one attribute data record, the step of storing the first field includes:**

“storing first and second subordinate fields that collectively identify a range of versions of an equipment model.”

However, **Beauchesne** discloses **“storing first and second subordinate fields that collectively identify a range of versions of an equipment model”** as other fields include a 10 digit current revision field, a 10 digit previous revision field, a 40 digit comment text field, a 8 digit source locating field and a 12 digit file data field. The revision field is used for storing a coded value designating the most recent revision made to any of the steps associated with the product. The previous revision field is used for storing a coded value designating the previous change (**Beauchesne** Col 6,

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Lines 12-19). Different revisions give different versions. Therefore the range of revisions gives us the range of versions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne's** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 30 is essentially the same as claim 9 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 10, **Chacon** does not explicitly teach “**the method of claim 9, wherein the first and second subordinate fields respectively identify a first version and a last version in said range of versions.**”

However, **Beauchesne** discloses “**the method of claim 9, wherein the first and second subordinate fields respectively identify a first version and a last version in said range of versions**” as other fields include a 10 digit current revision field, a 10 digit previous revision field, a 40 digit comment text field, a 8 digit source locating field and a 12 digit file data field. The revision field is used for storing a coded value designating the most recent revision made to any of the steps associated with the product. The previous revision field is used for storing a coded value designating the

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previous change (**Beauchesne** Col 6, Lines 12-19). The previous revisions tell us about the first version and the recent revision tells us about the last version.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne's** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 31 is essentially the same as claim 10 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 11 Chacon does not explicitly teach **the method of claim 1, wherein, for at least one attribute data record, the step of storing the first field includes:**

storing first and second subordinate fields that collectively identify a range of revision dates of an equipment model.

However, **Beauchesne** discloses, **"storing first and second subordinate fields that collectively identify a range of revision dates of an equipment model"** as other fields include a 10 digit current revision field, a 10 digit previous revision field, a 40 digit comment text field, a 8 digit source locating field and a 12 digit file data field. The revision field is used for storing a coded value designating the most recent revision

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made to any of the steps associated with the product. The previous revision field is used for storing a coded value designating the previous change (**Beauchesne** Col 6, Lines 12-19). Figure **2b** shows us the time/data for different revisions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne's** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 32 is essentially the same as claim 11 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 12, **Chacon** does not explicitly teach “**the method of claim 11, wherein the first and second subordinate fields respectively identify a first revision date and a last revision date in said range of revision dates**” as other fields include a 10 digit current revision field, a 10 digit previous revision field, a 40 digit comment text field, a 8 digit source locating field and a 12 digit file data field. The revision field is used for storing a coded value designating the most recent revision made to any of the steps associated with the product. The previous revision field is used for storing a coded value designating the previous change (**Beauchesne** Col 6, Lines 12-19). Figure **2b** shows us the time/data for different revisions and the previous

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revision would have the first revision dates and the recent revision would have the last revision dates.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne's** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 33 is essentially the same as claim 12 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 14, **Chacon** teaches “**storing in the database memory a first record including said first field, wherein the first field of the first record identifies a first class of equipment**” as there may be a number of different algorithms in use depending on the type of equipment (**Chacon** Col 39, Lines 46-48 & fig 5). The correct set of formulae to be applied to a given row on the tact table will be found by looking up the tact formula field in the corresponding stnfamdef record (**Chacon** Col 39, Lines 52-55). The table in Col 43, & Lines 15-25 teach that stnfamdef is equipment type record.

Chacon discloses the elements of claim 14 as noted above but does not explicitly teach the step of “**first version of a first model of equipment**” and “**second**

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version of said first model of equipment, the second version being different from the first version.”

However, **Beauchesne** discloses **“first version of a first model of equipment”** as the product main fields also includes a 4 digit product version field for storing information coded value specifying the manufacturing version of the board indicating the particular assembly line (equipment complement) on which the board will be manufactured (e.g. A, B) (**Beauchesne** Col 5, Lines 62-67) and **“second version of said first model of equipment, the second version being different from the first version”** as other fields include a 10 digit current revision field, a 10 digit previous revision field, a 40 digit comment text field, a 8 digit source locating field and a 12 digit file data field. The revision field is used for storing a coded value designating the most recent revision made to any of the steps associated with the product. The previous revision field is used for storing a coded value designating the previous change (**Beauchesne** Col 6, Lines 12-19). The previous revisions tell us about the first version and the recent revision tells us about the last/second version.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne’s** teaching would have allowed **Chacon** to manage and control process information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2) by having different versions of an equipment.

Claim 35 is essentially the same as claim 14 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 22, **Chacon** does not explicitly teach **the apparatus of claim 21, further comprising:**

“a communications interface capable of being connected to receive data from the class of equipment identified in one of the data records wherein the computer is connected to read data from the communications interface.”

However, **Beauchesne** discloses **“a communications interface capable of being connected to receive data from the class of equipment identified in one of the data records, wherein the computer is connected to read data from the communications interface”** as the server computer 10-1 operatively connects to each piece of equipment in each of the assembly lines A, B and N through workstations 20-10a through 20-30c via a standard local area network (LAN) 10-3 as indicated in FIG. 1. The workstations 20-10a through 20-30c are configured for controlling the operation of one or more units of equipment as indicated in FIG. 1 (**Beauchesne** Col 4, Lines 57-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Beauchesne’s** teaching would have allowed **Chacon** to manage and control process

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information pertaining to a variety of different equipments manufactured on a number of different manufacturing lines (**Beauchesne** Col 1, Lines 66-67 & Col 2, Lines 1-2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20, 38-41, 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Guillermo Rudolfo Chacon** (U.S. Patent No. 6,128,588) as applied to claims 1-6, 13, 15-16, 21, 23-27, 34, 36-37, 42 and 44 above, in view of **Martorana et al** (**Martorana** hereinafter) (U.S. PG Pub No. 2003/0236628).

With respect to claim 17, **Chacon** teaches a method of storing information in a database to characterize attributes outputted by different classes of equipment, comprising the steps of:

“providing a database memory device” as auto scheduling system 22 includes scheduler database 30 (**Chacon** Col 2, Lines 64-65).

“storing in the database memory device a plurality of attribute data records, wherein the step of storing each attribute data record includes” as

scheduler database 30 stores production models for simulation as well as data extracted from the manufacturing execution system 20 to be used for the simulation. The stored information includes T1 and T2 parameters, lot status, machine tact (time standard), and Kanban worksheets (**Chacon** Col 2, Lines 66-67 & Col 3, Lines 1-4).

“storing in that record a first field identifying a class of equipment” as there may be a number of different algorithms in use depending on the type of equipment (**Chacon** Col 39, Lines 46-48 & fig 5). The correct set of formulae to be applied to a given row on the tact table will be found by looking up the tact formula field in the corresponding stnfamdef record (**Chacon** Col 39, Lines 52-55). The table in Col 43, & Lines 15-25 teach that stnfamdef is equipment type record.

“storing in that record a second field identifying an attribute whose value is outputted by the class of equipment identified by the first field of that record” as according to the present invention, a method and system for creating customized machine tact information includes defining time standards as a function of process parameter and equipment parameters. For example, if a process parameter such as temperature, pressure, etc. and an equipment parameter such as equipment brand name, model, etc (**Chacon** Col 2, Lines 24-29). The machine tact information is created by accessing and using the stnfamdef table, which contain equipment type records defines/outputs the attributes/parameters.

Chacon discloses the elements of claim 17 as noted above but does not explicitly teach the step of **“storing in that record a third field specifying a**

conversion parameter that defines a conversion of the value of the attribute identified in the second field into physical units of measurement.”

However, **Martorana** discloses “**storing in that record a third field specifying a conversion parameter that defines a conversion of the value of the attribute identified in the second field into physical units of measurement”** as a system includes a thermal isolating chamber, an inertial measurement unit for making inertial measurements, and a temperature control system (**Martorana** paragraph 0014).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Mortorana’s** teaching would have allowed **Chacon** to effectively control the temperature of an inertial measurement unit within an isolating chamber (**Mortorana** paragraph 0008) by identifying the units of measurement for the attribute such as temperature.

Claims 38, 43 and 45 are essentially the same as claim 17 except they set forth the claimed invention as an apparatus, a data storage medium and are rejected for the same reasons as applied hereinabove.

With respect to claim 18, **Chacon** does not explicitly teach “**the method of claim 17, wherein, for at least one of the attribute data records, the conversion parameter stored in the third field specifies a physical unit of measurement.”**

However, **Mortorana** discloses **“the method of claim 17, wherein, for at least one of the attribute data records, the conversion parameter stored in the third field specifies a physical unit of measurement”** as a system includes a thermal isolating chamber, an inertial measurement unit for making inertial measurements, and a temperature control system (**Martorana** paragraph 0014).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Mortorana’s** teaching would have allowed **Chacon** to effectively control the temperature of an inertial measurement unit within an isolating chamber (**Mortorana** paragraph 0008) by identifying the units of measurement for the attribute such as temperature.

Claim 39 is essentially the same as claim 18 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 19, **Chacon** does not explicitly teach **“the method of claim 17, wherein, for at least one of the attribute data records, the conversion parameter stored in the third field specifies a scale factor.”**

However, **Mortorana** discloses **“the method of claim 17, wherein, for at least one of the attribute data records, the conversion parameter stored in the third field specifies a scale factor”** as reduces temperature stability requirements because

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sensor bias calibration and gyroscope scale factor calibration can be performed simultaneously (**Mortorana** paragraph 0042).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Mortorana's** teaching would have allowed **Chacon** to effectively control the temperature of an inertial measurement unit within an isolating chamber (**Mortorana** paragraph 0008) by identifying the units of measurement for the attribute such as temperature.

Claim 40 is essentially the same as claim 19 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

With respect to claim 20, **Chacon** does not explicitly teach “**the method of claim 17, wherein, for at least one of the attribute data records, the conversion parameter stored in the third field specifies a range of physical values.**”

However, **Mortorana** discloses “**the method of claim 17, wherein, for at least one of the attribute data records, the conversion parameter stored in the third field specifies a range of physical values**” as electronics associated with the instruments in instrument platform 78, FIG. 5 are designed to survive at temperatures of typically 390 degree F. The control electronics may be fabricated from silicon-on-insulator (SOI), which is capable of operating sufficiently up to temperatures of 480 degree F. The fabrication is giving the range of values from 390 degree to 480 degree.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Mortorana's** teaching would have allowed **Chacon** to effectively control the temperature of an inertial measurement unit within an isolating chamber (**Mortorana** paragraph 0008) by identifying the units of measurement for the attribute such as temperature.

Claim 41 is essentially the same as claim 20 except it sets forth the claimed invention as an apparatus and is rejected for the same reasons as applied hereinabove.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is listed on 892 form.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usmaan Saeed whose telephone number is (571)272-4046. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571)272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Usmaan Saeed
Patent Examiner
Art Unit: 2166



Leslie Wong
Primary Examiner

US
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